

function (in the following: OTF) of the optical systems. The OTF indicates which space frequencies, from which the object can be constructed by means of Fourier transformation, are retained in the optical imaging, and/or how parts of the space frequencies are attenuated. The resolution capability of the optical system (e.g. a light-optical microscope) is determined by the range in which the OTF of the system does not vanish. If the OTF vanishes completely in sections of reciprocal space, it is impossible, without additional assumptions about the object structure (e.g. spatial limitation, positivity), to reconstruct the corresponding space frequencies in an object image. There is general interest in the extension of the OFT in the largest possible region in reciprocal space, in order to increase the resolution of the optical system.

Before the paragraph spanning pages 4 and 5, please insert the following heading:

## **OBJECTS**

Please delete the first full paragraph on page 5.

Before the second full paragraph on page 5, please insert the following heading:

## **SUMMARY OF THE INVENTION**

Before the third full paragraph on page 9, please insert the following heading:

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Before the first full paragraph on page 10, please insert the following heading:

## **DETAILED DESCRIPTION**